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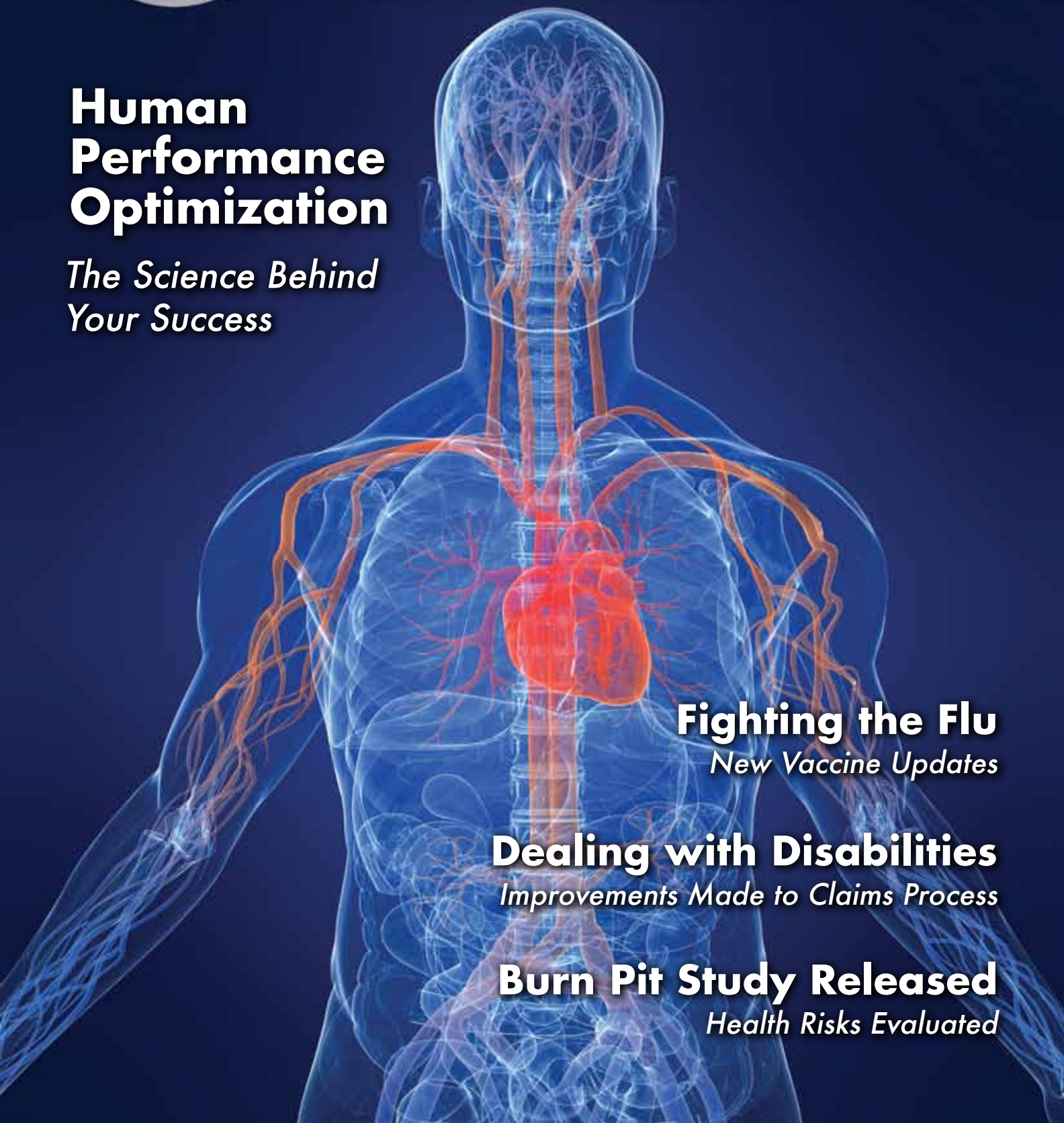
FORCE HEALTH PROTECTION AND READINESS



Human Performance Optimization

The Science Behind Your Success

Fighting the Flu

New Vaccine Updates

Dealing with Disabilities

Improvements Made to Claims Process

Burn Pit Study Released

Health Risks Evaluated

FORCE HEALTH PROTECTION AND READINESS

The Magazine of Force Health Protection and Readiness
2010 ■ Volume 5, Issue 3

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A Message from the Acting Deputy Assistant Secretary of Defense for Force Health Protection and Readiness

Welcome to the Force Health Protection and Readiness Magazine, a quarterly publication designed specifically to update America's military men and women, and their families, on important issues affecting the health and safety of those who serve.

Past issues of FHP&R have addressed such timely topics as burn pit emissions and the dangers of particulate matter, how the Department's new inTransition program is helping Service members as they move between health care providers and on to new locations, and how the new Defense Centers of Excellence is improving vision care and research.

In this edition of Force Health Protection and Readiness, you will learn how new techniques such as Surgical Restoration and Regenerative Medicine are giving new hope to wounded warriors, why seasonal flu vaccination is important, and how the Department's emphasis on Human Performance Optimization is improving the health, safety and performance of Service members at home and abroad.

As always, our writers and staff hope you will consider Force Health Protection and Readiness a key resource for the latest in health news and information, and we welcome your questions, comments, and ideas for stories of interest to our subscribers. Please let us hear from you at FHPwebmaster@tma.osd.mil. And in the meantime, stay healthy and stay safe!

Larry Sipos

Acting Deputy Assistant Secretary of Defense
for Force Health Protection and Readiness

Prescription Drugs and the Active Duty Military

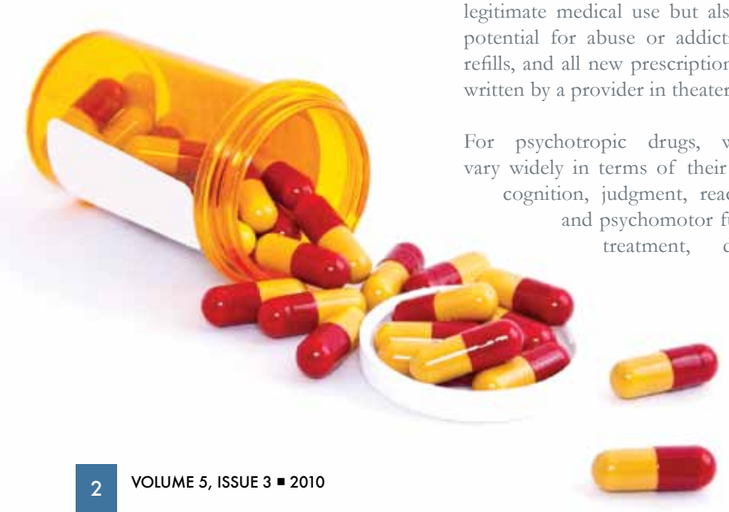
How the MHS is Ensuring a Fit and Ready Force

By: Terri Lukach, FHP&R Staff Writer

The health and medical readiness of America's military forces is a critical component of our Nation's security. It is also the number one priority of the Military Health System that employs an extensive system of individualized assessments to monitor and evaluate Service member health throughout one's military career.

Prescription drug medications are an integral part of these health evaluations, particularly before and after deployments, and the Department of Defense has established extensive policies to screen, prescribe, renew and monitor the use of prescription drugs to safeguard health and ensure a fit and healthy fighting force.

Indeed, important checks and balances exist throughout the system to protect Service members from overuse or abuse. For example, all deploying individuals are prescreened with a special tool, called the Prescription Medication Analysis and Reporting Tool, or PMART, that reports high-risk medications, automatically disqualifies members from deploying, identifies Service members who require a waiver, and provides reports on four target medication categories: sedative hypnotics, narcotics, anti-depressants and antipsychotics.



In addition to general pharmacy guidelines, specific medication restrictions have been established to help deployment centers evaluate each Service member's ability to not only carry out their own duties, but withstand the environmental conditions and mission demands of theater.

Prior to deployment, Service members receive only a limited supply of medication – a 180-day supply for chronic medications, a 120-day supply for psychotropic medications, and a 90-day supply for CII stimulants (drugs, as categorized by the Drug Enforcement Agency, as having a legitimate medical use but also a strong potential for abuse or addiction). Any refills, and all new prescriptions, must be written by a provider in theater.

For psychotropic drugs, which can vary widely in terms of their effects on cognition, judgment, reaction time, and psychomotor functioning, treatment, deployment and retention decisions for Service members taking these drugs are made on a case-by-case basis. Some may be cleared to deploy who take these medications; others may be disqualified. Lithium and anticonvulsants used to control bipolar symptoms, and antipsychotic medications used for psychotic, bipolar and chronic insomnia are some of the drugs that would disqualify a Service member from deploying. Others include any medications that would require special storage, laboratory monitoring or special assessments.

Service members in highly specialized war functions are strictly monitored for changes in their health prescription medication profile to ensure a fit operational force.

A network of point-of-service software systems track, collect and analyze health and medication data to equip MHS providers with the most up-to-date health care information and enable them to make the best health care and deployment recommendations for every Service member. Once in theater, integrated global data systems enable the MHS to monitor pharmaceutical activity.

By linking prescription medication and health information databases throughout the Department of Defense, the MHS is able to aggregate patient medication information, help prevent drug interactions, and safeguard Service member health on a global scale.

Flu Season Begins

One Shot Required

By Richard Searles, FHP&R Staff Writer

The 2010-2011 flu season is here and the new season brings changes to seasonal flu vaccine protection. Last season, two vaccines were required – the seasonal flu vaccine and the H1N1 vaccine. However, this year the seasonal flu vaccine will provide protection against the 2009 H1N1 flu strain. You'll be able to receive one flu vaccine but receive protection against all major circulating flu viruses.

"H1N1 is here to stay and the lines of who is at greatest risk [has] become blurred," said Col. Wayne Hachey, Director, Preventive Medicine, Office of the Assistant Secretary of Defense (Health Affairs). "There are no longer any guarantees about who the high risk groups are." In fact, the Centers for Disease Control and Prevention and the Advisory Committee on Immunization Practices expanded the recommendation for annual flu vaccination to include all people aged 6 months and older.

Flu vaccination is a mandatory annual requirement for all uniformed personnel and health care workers. "The vaccine is your best protection from getting the flu," said Col. Hachey. "The vaccine is safe and is being produced in record amounts." The flu vaccine has a long track record of being effective. Even during years that the vaccine was not a good match against catching the prominent virus, it still provided substantial protection against the serious consequences associated with the flu.

This year, the Services requested 18 percent more vaccines than last year. So, an ample supply should be available for anyone wishing to be protected. "The Services will use the first available vaccine doses to preserve operational effectiveness and protect our most vulnerable populations, but with such a robust vaccine supply, no one should be turned away," said Col. Hachey.

Influenza, also known as the flu, is a contagious disease that is caused by the influenza virus. It attacks the human respiratory tract (nose, throat and lungs). The flu is different from a cold. Influenza usually comes on suddenly and may include: fever, headache, tiredness (can be extreme), dry cough, sore throat, nasal congestion and body aches. These symptoms are usually referred to as "flu-like" symptoms.

"Again, the vaccine is safe and effective and is your best protection from getting the flu," said Col. Hachey. "Getting vaccinated should be a no brainer."

Restoring America's Wounded:
Advanced Surgical Technique Research

By: Laura Curtin, FHP&R Staff Writer

Use of improvised explosive devices in Iraq and Afghanistan has caused a marked increase in severe blast trauma, but today's military medical care has allowed many of the injured to survive. In fact, approximately 90 percent of the wounded survive serious injuries sustained on the battlefield.

"Survival rate… is thanks to research in combat casualty care, the great medical care we have in theatre, plus the military's phenomenal evacuation system [from the battlefield]," Col. Jan Harris said. Col. Harris is a science manager for Department of Defense (DoD) funded research projects within clinical and rehabilitative medicine. This general area of research is specifically for the purpose of restoring function and quality of life to America's wounded through advanced therapies.

Returning Service members to duty and helping them lead productive and fulfilling lives are of critical importance to the military and medical communities. There are many research investigations occurring to advance rehabilitation of the injured. Some research studies within the clinical and rehabilitative medicine portfolio work with prosthetics and amputee care; others focus on repairing vision, mitigating chronic pain, regenerative medicine techniques, and healing burns. One study specifically focuses on improving appearance and quality of life for civilians and Service members who have experienced facial trauma.

Service members are returning from the battlefield with limb, head, face, and other injuries that can take years to treat. These injuries can result in significant lifelong impairment, but with the help of researchers, recovery may include more options as techniques improve and medical science evolves.

A very severe facial trauma typically requires 30 to 40 surgeries just to close wounds and allow some functionality.

Low Risk and Minimally Invasive Surgery

A very severe facial trauma typically requires 30 to 40 surgeries just to close wounds and allow some functionality. In some cases the individual is left with a severely disfigured face. Even less severe facial trauma can leave behind scars. Visible facial injuries can impact the ability to integrate back into society, affecting both personal relationships and employment opportunities. While current medical procedures can do a lot to reconstruct these injuries, physicians consistently strive to find better ways to accurately restore facial features.

One method under investigation is called structural fat grafting for craniofacial trauma. The fat grafting technique is a common cosmetic and reconstructive procedure, and was performed approximately 65,000 times by plastic surgeons in the United States last year. Fat grafting, in this particular case, is where the surgeon transfers excess fat deposits from other areas of the body to the injured face. Using a very specialized technique, this low risk and minimally invasive procedure adds contour to the injured face. The wounded person's physical appearance can typically improve after this outpatient procedure.

Dr. J. Peter Rubin is an associate professor of plastic surgery for the McGowan Institute of Regenerative Medicine at the University of Pittsburgh School of Medicine. Dr. Rubin currently serves as a principal investigator of DoD-funded research that strives to accurately restore wounded warriors after combat related injury.

Dr. Rubin's fat grafting project utilizes specialized instruments to inject fat into scar tissue planes at the exact site of injury to offer an improved aesthetic appearance for the patient. Reconstructive and cosmetic procedures can increase the volume and shape of the injured body site. The best technical ability and guidance are administered to accomplish the surgery.

Dr. Rubin explains that "the area of investigation is to see how well the specialized technique lasts over time, as injected fat can lose volume. We measure volume of the fat graft with high definition CT scan and 3D typography. A psychologist works with participants at every point of the process to assess quality of life immediately after the battlefield injury, in preparation for the procedure and again after the surgery."

Important project goals include validating the treatment and then educating military physicians on the specialized technique for use at military treatment facilities. Also important to the research study is if the Service members' perception of quality of life improves after the procedure.

In September, the fat grafting study had begun treatment for approximately 10 of the 20 total participants approved for the study. Patient enrollment is ongoing until all 20 patients have been identified; viable candidates are those with any visible deformity of the face or head at least three months into recovery from the initial facial trauma. Men and women who are active duty or former members of the United States Military may be eligible. Prior surgery of the face or skull does not prevent participation in this study, as fat grafting is often used to further improve the results after other surgical procedures. For more information about this study, please contact Ms. Carlynn Graves by email at crj9@pitt.edu.

U.S. Navy Machinist's Mate 1st Class Michael Lammey and his wife look at the ribbons he has earned during his Navy career at Brooke Army Medical Center in San Antonio, Texas, Aug. 12, 2009. Lammey is recovering at the hospital after being burned when a boiler exploded aboard the submarine tender USS Frank Cable (AS 40). (U.S. Navy photo by Mass Communication Specialist 2nd Class Jhi L. Scott/Released)

"I think that it is the soft tissue overlying the bones and skull that gives humans the most recognizable traits, which injury [to the face] seriously changes. This outpatient procedure has the potential to make a big difference in appearance and integration back to society," Dr. Rubin said.

About DoD's Research Investment Initiatives

The DoD's Office of Force Health Protection & Readiness manages a portion of the DoD's investment in medical research and development. Specifically, the Defense Medical Research and Development Program (DMRDP) manages research, development, testing, and evaluation plans for using Defense Health Program (DHP) funding.

Within the DMRDP are six major research portfolios that address a variety of operational needs in research. DMRDP is involved with directing science that addresses wounded warrior focus topics outlined by the Secretary of Defense. These important areas include traumatic brain injury (TBI), post-traumatic stress disorder (PTSD), prosthetics, eye injury, and other deployment and battlefield injuries.

Each research portfolio is managed by joint program committee teams of experienced medical and military personnel. Col. Harris chairs one of the six joint program committees within the DMRDP – the Clinical and Rehabilitative Medicine (CRM) portfolio. CRM focuses on methods for restoring and rehabilitating war injuries.

Main areas of the CRM portfolio are neuromusculoskeletal injury, acute and chronic pain, regenerative medicine, and sensory system traumatic injury. The DHP investment for this portfolio area is currently funding many research studies along with several clinical trials. Related research projects are funded through the Services, other government agencies, academic institutions and industry.

A large collaborative group executes clinical trials. "Four military treatment facilities are part of a large clinical consortium. It includes Walter Reed Army Medical Center, San Antonio Military Medical Center, Navy Medical Center San Diego, and Navy Medical Center Portsmouth," Col. Jan Harris explained.

The CRM portfolio also includes research efforts that are directed at TBI-related sensory dysfunction (such as visual and hearing dysfunction), and cognitive rehabilitation in the context of TBI. CRM encompasses fundamental research to better understand both injury and healing mechanisms through clinical trials. The clinical trials aid in establishing safety and effectiveness of new products and treatment strategies. The DoD's research investments offer hope not just for wounded Service members, but also for the broad medical community in finding improved methods for better patient healing.

The Disability Evaluation System

Process Improvement for Service Members with Disabilities

By: Terri Lukach, FHP&R Staff Writer

Apart from the wars in which the Nation is now engaged, treatment of the wounded and their care and reintegration into everyday life is the Department's highest priority. Fortunately for those who have suffered physical or other disabilities in service to our country, it is also the priority of the Department of Veterans Affairs (VA). The goal of both departments is a cooperative and uninterrupted continuum of care and support as Service members transition from active duty to veteran status. For the past several years, both departments have worked to improve collaboration at all levels.

One fundamental challenge to getting wounded Service members the compensation they deserve has been the two different systems the departments have been using to rate disabilities. The Department of Defense (DoD) has traditionally rated disability based on fitness for military service while the VA rates disability based on fitness for civilian employability – a difference that has often produced considerable frustration for Service members and their families. Other challenges have included different sets of information, different vocabularies, and no single, accessible electronic database of information.

To overcome these impediments, and to provide easier, quicker access to benefits, the DoD and the VA launched a joint VA/DoD Disability Evaluation System (DES) pilot program in 2007. Starting with three sites in the National Capital Region, the pilot was later expanded to include 18 military installations of all Services. In 2008, six more installations brought the total to 27 nationwide. With more than 27,000 Service members entering the DES process every year, the 27 sites account for more than 13,000 medical evaluations each year or about 47 percent of the annual case load.

The pilot program had three goals: A single disability exam with standards used by both departments; a single disability rating calculated by VA but applied by both departments according to applicable laws; and expeditious payment of VA benefits within 30 days of a member's separation from service.

Recently, Mr. Robert Hite of the Veterans Affairs Program Coordination Office within the Office of the Assistant Secretary of Defense (Health Affairs), and Mr. Keith Limbacher, Deputy Division Chief of the Change Management Division in the Office of the Under Secretary of Defense for Personnel and Readiness, discussed the issues associated with the availability and sharing of paper-based medical records and ways to improve how both Departments manage medical records to better support the transitioning Service member.

In the near term, they said, the goal is a "bridge solution" that would create an electronic repository for health record information. The "bridge" would leverage DoD's existing electronic health record (EHR) capability through digitization, eliminate the need to print documents out of AHLTA, and create a web-based portal for VA and other stakeholder access.

Another goal is to create an enterprise-wide image sharing capability for all types of artifacts and images (A&I) including radiographs, photographs, waveforms, audio files, video and scanned documents and global access to A&I repositories.

Benefits of the system would include electronic access to medical and dental records via a one-stop DoD portal that would display information requested from authorized DoD and VA users, including the Service member. Regular verification of the records by both Service members and providers would ensure accuracy and accountability.

Eliminated would be the overprocessing of hybrid records; the mailing of Service member records from place to place, which would also reduce costs and eliminate the possibility of losing records en route; transferring records between Departments – DoD would retain ownership and physical control; the reworking and interfiling of incomplete, loose, or late records at VA; and the handling and storage of records, which would also reduce labor and costs.

While much remains to be done, much has been accomplished in the ongoing effort to fulfill our promise to provide the very best care and support to those who have sacrificed so much to keep our Nation strong and free.

Battling Environmental Threats to Combat Forces

By: Terri Lukach, FHP&R Staff Writer

Today, threats to the Nation's safety and security have taken America's fighting forces far from the battlefields of the 20th century, not just in terms of geography, but in nearly every other context as well. In addition to a new kind of enemy, the new type of war in which America has been engaged in since 2001 has utilized a new defense strategy, a new force structure, and new capabilities never before employed in the history of warfare.

Yet sending our forces to fight in mountains of Afghanistan and deserts of Iraq have entailed a number of potentially hazardous environmental threats unrelated to the more deadly threats of combat. Among them is exposure to burn pit emissions that has raised fears of serious long-term effects for those deployed to locations with open burn pit operations.

In response to this environmental threat, the Department of Defense (DoD) undertook a series of scientific studies and assessments of the associated long-term risks to health.

Comprehensive analysis of the effects of exposure to burn pit smoke began in 2005 with routine air sampling at Joint Base Balad, the largest burn pit in theater. It continued with an environmental health site assessment in 2006, and a burn pit screening health risk assessment (HRA) and addendum conducted at Joint Base Balad from 2007 to 2008. Those studies incorporated the results of hundreds of additional air samples collected around the base, and included smoke and other pollutants in the air at the time. Using U.S. Environmental Protection Agency risk assessment methodologies, the study then assumed worst case scenarios, presuming that everyone assigned to the base had been exposed to higher levels of identified contaminates 24 hours a day, seven days a week, for up to a year.

As with previous studies, the results of this assessment, later validated by the Defense Health Board, found the risk for cancer or other serious long-term health effects to be low. Still, concern among Service members and veterans who had deployed to bases with burn pit operations persisted.

Based on those concerns, and to validate the findings of the HRA, a new set of studies was ordered by the Acting Deputy Assistant Secretary of Defense for Force Health Protection and Readiness in October 2009. The difference between this study and previous surveillance was that, for the first time, these studies included comprehensive electronic medical records and self-reported health outcomes data, some of which was controlled for health-related behaviors such as smoking and physical activity, and included members of the Reserve and National Guard. The studies followed the health status of individuals for up to three years after they had left military service.

Two highly respected military institutions were charged with conducting the study: the Armed Forces Health Surveillance Center (AFHSC), an acknowledged leader in documenting the nature, magnitude and distribution of threats to the health and readiness of our forces, and the Naval Health Research Center (NHRC), which manages and executes expeditionary operational medical research, development, testing and evaluation for the DoD.

The AFHSC conducted a retrospective cohort study to compare incidence rates of respiratory, circulatory, and cardiovascular diseases, ill-defined conditions, and sleep apnea among deployers and non-deployers; responses on post-deployment health assessment forms among individuals deployed to sites with burn pits and sites without; and the rates and proportions of medical encounters for respiratory outcomes while assigned to four locations in Iraq and Afghanistan.

Some of the AFHSC studies further compared active Army and Air Force Service members deployed to those four locations as well as the Republic of Korea from January 2005 to June 2007, to an active component population based in the continental U.S. who had never deployed.

The NHRC conducted studies to evaluate birth outcomes of infants whose parents had been exposed to burn pit emissions before and during pregnancy; newly reported and recurring respiratory illness; chronic multisymptom illness (CMI); and newly reported lupus and rheumatoid arthritis. The studies included active duty, Reserve and National Guard members of all Services at three bases with burn pits – Joint Base Balad, Contingency Operating Base Speicher, and Camp Taji, Iraq.

For nearly all outcomes, the preliminary results of these studies showed no evidence, on a population-wide basis, of increased risk for serious long-term health effects as a result of exposure to burn pit smoke.

For all outcomes in the AFHSC studies, Service members deployed to locations in Iraq, Afghanistan and Korea had either similar or significantly lower incidence rates compared to those who had never deployed, with the exception of one slightly elevated outcome at Camp Arifjan, Kuwait, which had no burn pit. Comparisons of medical encounters in theater among the four locations, including one with a burn pit and two without, did show a higher percentage of respiratory-related encounters at one burn pit location – Joint Base Balad – but these effects did not persist upon redeployment.

The NHRC studies showed that possible burn pit exposure was not associated with pre-term birth or birth defects, increased risk for new or recurring respiratory outcomes, CMI, or newly reported rheumatoid arthritis. The study did find a very small increase in the chance of birth defects among a subset of infants whose fathers were exposed more than 280 days prior to conception, and a statistically significant risk of newly reported lupus was associated with Joint Base Balad. Both elevations were so small they could have occurred by chance.

Because of limitations inherent in these and all studies that may prevent the detection of small elevations in the incidence of certain conditions, it is medically plausible that some personnel who have deployed to locations with burn pits may have developed chronic health conditions or experienced an aggravation or worsening of pre-existing conditions as a result of exposure to burn pit smoke.

The studies followed the health status of individuals for up to three years after they had left military service.

In releasing the results of the study earlier this year, the DoD Director for Force Readiness and Health Assurance, Dr. R. Craig Postlewaite, said, "The preliminary findings of this report show no evidence, at this point in time, of serious health risks, on a population-wide basis, for Service members assigned to locations with burn pit operations, and no serious health impacts that can be attributed to burn pit exposure several years post-deployment. These findings should provide some reassurance to Service members and veterans who have been exposed to the smoke and are concerned about their long-term health.

"That said," Postlewaite continued, "medical surveillance of both deployed and redeployed Service members is ongoing and will continue for the full range of health outcomes. Environmental monitoring of deployment sites continues, as does exposure-related research by both the Department and the Services."

"And, it goes without saying, that all U.S. personnel will get the treatment they need and deserve for any adverse health effects, regardless of the cause," Postlewaite said.

What happens now? The DoD will continue to examine this issue and to validate these preliminary findings. On June 17, 2010, the report was sent to the Defense Health Board for scientific peer review. It will also be provided to the Institute of Medicine for possible inclusion in its study on the long-term health consequences of exposure to burn pit smoke. And, a pulmonary health working group, comprised of DoD and non-DoD clinicians and researchers, has been formed to recommend research regarding deployment respiratory disease concerns. In addition, efforts continue in theater to replace burn pits with incinerators whenever feasible.

For more than three years there has been intense interest in the potential health effects of burn pit smoke by veterans, the media, and Congress that initiated two investigations. Yet despite claims by some that DoD is doing little to address the concerns of past and present Service members, in fact, as this report demonstrates, the DoD is working tirelessly to scientifically investigate the effects of this particularly worrisome environmental threat to the health and well-being of its deployed forces.

Clearly, in this new century, our forces will continue to face environmental threats to their health and safety, but as this report demonstrates, the Department will continue to do all it can to protect and sustain their health and well being.

Human Performance Optimization
Maximizing the Capability of Our Warfighters

By: Kelly Kotch, FHP&R Staff Writer

Human Performance Optimization (HPO) has been a buzzword in the military for nearly a decade and is a term commonly used to describe a technique to improve an individual's performance. This concept is also known as Human Performance Modification, Human Performance Enhancement, Human Performance Technology and Human Systems Optimization. All terms generally describe Department of Defense (DoD) and Service efforts to improve the health, safety and performance of Service members. Over the past decade, these programs and initiatives have evolved, but work and integration continues.

In 2004, the DoD recognized missing elements of the overall HPO portfolio, so a new HPO initiative was created to fill the gaps in research, policy and advocacy. Stemming from this new initiative, the DoD formally defined the concept of HPO. HPO is the process of applying knowledge, skills and emerging technologies to improve and preserve the capabilities of DoD personnel to execute essential tasks. Simply stated, the goal is to optimize the performance of warriors in any and all conditions. The main goals of the DoD's HPO program are to optimize and sustain the mental and physical performance and resilience of the warfighter; reduce injury; decrease the incidence of illness; accelerate recovery from missions, illness, and/or injury; provide information and knowledge transfer from laboratory to line; and improve the human weapon system's ability to accomplish the mission.

The Department established the Human Performance Resource Center (HPRC) to communicate information, policies and research results to our commanders, warfighters, medical professionals, and researchers. HPRC aims to make a difference for any military organization and its Service members who are deploying, currently deployed or in reset.

The HPRC strives to take HPO information and research results and make them readily available to warfighters, military leaders, health care providers and researchers. It captures, organizes, analyzes and summarizes HPO research outcomes and evidence-based data in non-technical terms as well as accepts and answers queries from the field on HPO products or issues.

The HPRC field works on, develops and maintains information for our Service members concerning:

- physical and psychological resilience
- preventive medicine
- extreme climate adaptation
- nutrition and dietary supplements
- medications for performance enhancement
- medications for sleep, fatigue and alertness
- rapid recovery and return to optimal performance
- health promotion
- human systems integration related to health sciences

The HPRC does not focus on:

- leadership effectiveness and organizational climate
- job/task specific training and education
- quality of life issues
- health assessments
- casualty care and treatment
- medical care and rehabilitation
- recruitment/job selection criteria

Other current areas of focus for HRPC include sleep management, performance at altitude and in the heat, workout regimes, energy management, social/psychological resilience, and decision-making/cognitive enhancements.

The HPRC is working on its dietary supplement system. Dietary supplements are commonly used by Service members so many questions and concerns often arise about the benefits and use of supplements. The HPRC is working with the DoD Dietary Supplement Subcommittee to develop and host a classification system for supplements. Color codes will identify supplements according to level of concern and benefit, and short monographs will be available for those who desire additional information. An interactive educational module on dietary supplements is being developed for the web. The HPRC has partnered with the Natural Medicines Comprehensive Database so all health care providers and Service members have free access to scientifically-based information on over 60,000 supplements. This database provides evidence-based information on thousands of natural medicines and alternative therapies including safety, effectiveness, adverse reactions, drug interactions, and more. In addition, the database has an Interaction Checker that provides data and severity ratings on more than 3,800 potential interactions between alternative therapies and drugs. It is a great tool that all Service members can access.

For more information about Human Performance Optimization and the Resource Center, please visit *www.humanperformanceresourcecenter.org*.

DoD Study Finds High Rates of Gender Violence in Congo

By: Matt Pueschel, FHP&R Staff Writer

A recent study conducted in the Eastern Democratic Republic of the Congo (DRC) revealed that perpetrators and victims of high rates of sexual gender-based violence (SGBV) in the region included large numbers of both men and women.

The study was co-funded by DoD's Africa Command, the non-governmental organization (NGO) International Medical Corps, and McGill University. The results of the study suggest an opportunity for increased and more directed civil-military collaborative medical outreach efforts in the region. "U.S. AFRICOM was pleased to have played a role in making this research possible to help inform institutions and organizations involved in SGBV outreach and assistance programs in the DRC," U.S. Africa Command officials said.

The study, "Association of Sexual Violence and Human Rights Violations with Physical and Mental Health in Territories of the Eastern DRC," was published in the Aug. 4 *Journal of the American Medical Association (JAMA)* and can be found at *http://jama.ama-assn.org/cgi/content/short/304/5/553*. The results of the study show that self-reported sexual violence (SV) occurred in nearly 40 percent of adult females and 24 percent of adult males in North and South Kivu provinces and the Ituri district. Females perpetrated conflict-related SV in about 41 percent of the female victims' cases and 10 percent of the male cases. "The quantity surprised me," said the study's senior author Dr. Lynn Lawry, a senior

humanitarian assistance/NGO consultant within the Department of Defense's (DoD's) Office of Force Health Protection and Readiness (FHP&R). "The overall rate of sexual violence was twice what I expected. Furthermore, perpetrators were both women and men, it was not just men. We can no longer continue to ignore men as victims."

The study suggests new effective health care delivery strategies that might be developed in Eastern DRC will need to address both women and men who have experienced SV. "Protection from sexual gender-based violence should be considered by the U.N. to include men and boys," advised Dr. Lawry. "It challenges the paradigms of men not being victims, and challenges the myth that women are not perpetrators. It's fascinating, high interest, and contradicts the accepted paradigm."

The cross-sectional population-based study further indicated that about 67 percent of the survey population in North and South Kivu and the Ituri district reported incidents of conflict-related human rights abuses such as property, physical or sexual violations committed against survey respondents or a household member. Meanwhile, 41 percent of the adult population represented in the study met the symptom criteria for major depressive disorder and 50 percent met the criteria for PTSD. With the addition of sexual violence, those rates nearly double. "That's a huge psychological burden that has to be addressed. I didn't expect human

rights violations to be so high and also so violent," Dr. Lawry said.

Researchers further found that 67 percent of adults have inadequate access to health care and 95 percent have inadequate access to mental health care. Furthermore, based on current population estimates, the extrapolated randomized survey sample indicates that as many as 1.3 million women and 760,000 men in the region may have suffered SV and might need SV-related health care services. "Rehabilitation centers with psychosocial support, including programs to address mental health, justice and livelihoods, were listed as the most common need followed by education, income generation and religious counseling/support," the researchers reported.

The communities surveyed in the study are not currently rebel-held, but still have rebel and FARDC (Congolese armed forces) incursions. The war fought on Congolese land among six countries, which was ignited by an influx of armed Hutu militias that had fled Rwanda and proceeded to attack DRC ethnic Tutsis, was declared over in 2003 after leaving millions dead and the country's riches looted. But these areas are still considered at risk of being infiltrated by active combatant groups. Residents are left coping with seemingly perpetual violence in which civil conflict and instability have reigned for more than a decade and placed the DRC on the list of the world's worst humanitarian crises.

The study's mix of several university, NGO and DoD-affiliated researchers collaborated with Congolese interviewers and translators to conduct the cross-sectional cluster study for four weeks in March 2010. The 24 surveyors set out in three teams, walking through jungle paths, and riding motorcycles and dug-out canoes to reach some of the most remote villages. The study comprised a sample of 67 clusters, or villages, and 998 households representing 5.5 million adults in the three areas surveyed. "We tried very hard not to eliminate villages because they were hard to get to," Dr. Lawry said.

DoD's FHP&R program develops policies that encourage the U.S. Military Health System to plan and work closely with civilian U.S. development agencies, foreign governments and security forces, NGOs and international organizations to pursue effective ways of providing medical support and building local health care capacity to enhance stability in combat, post-conflict, disaster or at risk countries like DRC. "We need to make sure we understand the host nation's culture and its health infrastructure requirements," advised Dr. Warner Anderson. "We need to ensure what we are doing is what they need. We have to work with host country health advisors and our interagency civilian counterparts during humanitarian missions to create a lasting benefit and then sustain that. We also are trying to tap into the knowledge base of the civilian and academic community to help improve how DoD conducts medical support activities in these vulnerable countries."

History of Vaccines Proves Helpful

MILVAX Moves Forward to Increase Awareness

By: Chris Orose, Military Vaccine Agency

With a focus on recent accomplishments and an eye toward ever-expanding future missions, the Military Vaccine (MILVAX) Agency held its Annual Refresher training this summer in Crystal City, VA.

As detailed by keynote speaker Dr. Paul Offit of the Children's Hospital of Philadelphia, one must know and appreciate the history of vaccines in order to move forward to more significant accomplishments. That essential knowledge, Dr. Offit noted, includes how vaccines were made, what advances were made in manufacturing, how patients respond to immunizations, how effective vaccines are against disease, and various triumphs and controversies throughout the years.

Dr. Offit also described the "birth of fear" surrounding vaccines, partly attributed to the Internet and the groundswell of online anti-vaccine movements. He was personally involved in many cases in which those fears could be quelled by scientific facts showing vaccines as a safe and effective means of disease prevention. He described some instances where choosing not to be immunized led to occurrences such as a 2006 outbreak of pertussis in Delaware, and a 2008 measles epidemic.

This was all told under the umbrella of the Department of Defense's (DoD's) most successful influenza season ever in 2009-2010. As MILVAX Director Col. Michael Krukar noted, each of the Services and the U.S. Coast Guard achieved their highest-ever compliance rates in both the Seasonal and Novel A (H1N1) influenza vaccination campaigns, surpassing the 90 percent threshold for the first time. The 2010-2011 influenza season is underway and will involve just one vaccination because the H1N1 strain was added to the seasonal influenza vaccine, eliminating the need for an additional immunization.

A universal immunization tracking system [which] ... will not only track the immunization status of Service members, but also the beneficiaries and retirees...could begin as early as spring of 2011.

Col. Krukar also presented MILVAX's vision for the future, including the now-completed integration of the Vaccine Healthcare Centers (VHC) Network under MILVAX, the expansion of the highly successful Accession Screening and Immunization Program (ASIP), and various post-licensure safety studies being conducted by MILVAX's Safety and Evaluation Division.

One of the most anticipated developments is the future implementation of a universal immunization tracking system for all of the Services. This developing system, which could begin pilot testing this September, will not only track the immunization status of Service members, but also of beneficiaries and retirees. System completion and integration could begin as early as spring of 2011.

The 2010 Annual Refresher also had more of a hands-on component to training than in the past with several panels leading discussions throughout the sessions. A panel of representatives from DoD, each Service and the U.S. Coast Guard gave updates on their immunization efforts and compliance, and each took several questions from attendees to better enhance the understanding of the Services' policies and procedures.

Hands-on learning also included a session on best practices for conducting mass vaccination campaigns, with presenters drawing on their personal experiences with MILVAX and the VHC to discuss best practices.

Attendees participated in a risk communication exercise, using a theoretical smallpox outbreak as the setting for effective communication. Also included was an update on the ongoing, worldwide efforts of the Armed Forces Health Surveillance Center, which is a major part of DoD's program to identify diseases, treatments and health trends in more than 75 countries. It was noted that DoD was the first to identify the H1N1 influenza virus, and it continues to monitor the safety and effectiveness of the H1N1 vaccine.

FHP&R Health Policy Work Presented at Annual Conference

By: Matt Pueschel, FHP&R Staff Writer

The 13th Annual Force Health Protection Conference was held August 7-13 in Phoenix, AZ.

The conference was hosted by the U.S. Army Public Health Command with support from Force Health Protection and Readiness (FHP&R), and featured approximately 2,300 attending professionals from DoD, the Public Health Service, Veterans Affairs, academia, nongovernmental organizations and partner countries. The conference included over 700 presentations and 130 exhibits centered on the theme of "Military Preventive Medicine and Public Health."

Several FHP&R speakers delivered presentations, including important updates on deployment mental health assessments and new studies regarding behavioral health provider retention.

New Person-to-Person Mental Health Assessments

As part of an effort to improve early identification of Service members who suffer from PTSD, depression or risky drinking habits and provide them with timely specialty care if needed, DoD issued new policy guidance in July requiring the Services to implement person-to-person mental health assessments for all Service members who deploy.

The assessments can be administered either face to face, via telephone, or by video conference in a private setting by licensed mental health care professionals or trained medical personnel. Assessments are delivered at four points: within two months prior to deployment; 3-6 months after deployment; 7-12 months after deployment; and again 16-24 months after deployment.

DoD issued new policy guidance requiring the Services to implement person-to-person mental health assessments for all deploying Service members.

Assessments will now include detailed written questions about mental health history, psychological concerns, medication use, drinking habits, upsetting experiences, and major life stressors. Health care providers will follow a set of guidelines based on current best practices that specify follow-up questions to ask in a person-to-person discussion, and considerations to follow for possible specialty referral. "We're asking a lot of primary care providers, so we need to give them training and guidance to do a mental health assessment and make appropriate referrals," said Cdr. Meena Vythilingam, MD, USPHS, Deputy Director of FHP&R's Psychological Health Strategic Operations (PHSO) directorate.

The new mental health assessments include an additional step where Service members fill out in-depth, validated questions to "drill down" into their PTSD and depression symptoms. For example, as part of the initial PTSD self-reporting written component of the new mental health assessments, Service members are asked to fill out a primary care scale for PTSD (PC-PTSD) that includes whether they have had a frightening or upsetting experience in the past month that caused nightmares, avoidance of situations that reminded them of it, constant vigilance, or made them feel detached. If the Service member answers "yes" to two or more of these questions, they are asked to complete an additional list of 17 PTSD questions that help providers determine the severity of PTSD symptoms. In addition, Service members must indicate if PTSD and depression symptoms are interfering significantly with their ability to function at work, home and in social activities. "It's not just the severity of PTSD or depression," Cdr. Vythilingam advised. "It is very important for the primary care provider to assess whether these symptoms affect a Service member's functioning."

The provider then conducts a person-to-person dialogue to review all of the written responses, identify areas of concern, assess risks, elucidate details, document the medical record and provide specialty referrals for follow-up appointments if indicated. However, it is important to note that even if Service members answer "no" to all of the initial written questions, they still must speak directly with a provider.

The FHP&R exhibit was showcased at the FHP Conference this summer in Phoenix, AZ. Featured directorate programs included: Force Readiness and Health Assurance; Medical Countermeasures; Civil-Military Medicine; Deployment Technologies and Support Programs; Defense Medical Research and Development Program; Psychological Health; International Health; and Operational Medicine and Medical Force Readiness.

"We bridged that gap between filling [out] a form and [speaking to] a provider. We've added detailed training about what follow-up questions for the primary care provider to ask [regarding] positive responses to initial questions," Cdr. Vythilingam said. "We've come up with very clear training guidelines for health care providers, which include assessment of suicide and violence risks."

Alcohol-related questions gauge severity of use (maximum drink limits are surpassed if a man consumes more than 14 drinks in a week or four on one occasion, or a woman drinks more than seven in a week or three on one occasion), and management of risky drinking.

In addition to licensed mental health providers, other health care professionals who already administer some of the existing deployment health assessments can be certified to deliver the new mental health assessments through an online training program. For more information, please visit *www.pdhealth.mil* or *www.fhpr.osd.mil*.

Improving Behavorial Health Provider Retention

Dr. Jill Carty, PHSO's Executive Officer, discussed the results of a FHP&R-contracted survey carried out this spring that was aimed at identifying incentives to improve military retention of active duty psychiatrists and psychologists. The survey results included 338 written responses from psychologists and psychiatrists across the Services.

72 percent of psychologists were satisfied with their jobs compared to just 46 percent of psychiatrists.

While 60 percent of all respondents said they were satisfied with their jobs, the rest said they were somewhat or not at all satisfied. Of particular note was the finding that 72 percent of psychologists were satisfied with their jobs compared to just 46 percent of psychiatrists.

The majority of respondents rated increased financial incentives, such as higher retention bonuses, a retirement policy that counts bonus pay toward retirement benefits, and higher base pay as items that would encourage them to extend their stays in the military. Reduced administrative duties, counting medical or graduate school toward time served, shorter and fewer deployments, and promotion criteria that emphasizes clinical skills were also rated among top potential incentives to stay in the service. "What we found is that financial support and education opportunities were the top reasons to join the military for all providers," said Dr. Carty.

Desire to serve the country was another top reason for joining. "Family tradition and leadership opportunities were the least important for all providers," Dr. Carty added.

As far as enjoying specific aspects of their military service, 70 percent or more of the survey respondents gave high marks to mental health care treatment practices, camaraderie among mental health providers, professional development opportunities and leadership opportunities. However, only 50 percent or fewer of all respondents had high ratings for provision of administrative and clinical support staff, morale, and mental health care management and administrative policies.

This study arose from a DoD Mental Health Task Force recommendation a few years ago that stressed retention of psychologists and psychiatrists as being critical to serving the needs of active duty personnel and their families.

Family Readiness, Vermont-Style

By: Judith S. Harris, Certified Health Educator, Decade of Health

Vermont has the distinction of deploying the most Guard members per capita of any state during the Iraq and Afghanistan conflict. In a largely rural state, supporting the family members of these Service members can present a huge challenge. Fortunately, Vermont has a strong and well-organized Family Readiness Program (FRP). The state and federal government jointly fund a core of highly trained staff (see box) who in turn support the all-volunteer Family Readiness Group (FRG) system.

Currently, Vermont has 30 Army National Guard (ARNG) FRGs and is working toward 51. The FRGs follow program guidelines established by both the National Guard Bureau and the state. Usually the FRG leadership is command-appointed and consists of a Chairperson, Secretary, and Treasurer, plus coordinators for areas such as phone tree, youth activities and special events. These volunteer leaders and other dedicated volunteers stay in touch with their member families through regular member meetings, planned events, and "well-check" phone calls. Families of deployed soldiers receive a monthly call from an FRG volunteer and a FRP staff member. In addition, at the commander's request, FRG staff communicates command messages via the phone tree.

Communication is the FRGs' primary mission. An equally important mission is building a community for families who are scattered throughout the region and in communities that are relatively unaware of the hardships imposed by the deployment cycle. Actual deployment is only one aspect of the busy lives of Guard personnel who are not only away for training and state missions, but monthly weekend drills as well. The FRP and FRG staffs work together to identify families in need and help with financial issues, high levels of stress, family emergencies, social and emotional support, and readiness for deployment (financial readiness, family care plans, communication plans, etc.).

Actual deployment is only one aspect of the busy lives of Guard personnel who are not only away for training and state missions, but monthly weekend drills as well... Many families are unaware of the support available; others are reluctant to seek help.

Community knowledge helps the strong network of FRG volunteers to search out support needs and guide families to appropriate services. Many families are unaware of the support available; others are reluctant to seek help. Valerie Sample, a Vermont Family Readiness Assistant, has had extensive experience with deployment: "My husband has been on two deployments and each time I've had a baby in my arms as we waved goodbye. Our boys are now 4 and 8-years-old and we're gearing up for another deployment separation. The last deployment was a tough one… The FRG kept me busy and focused. The Family Readiness Center was nearby and the staff was there to welcome me and, in all honesty, save my sanity… by getting me out to social events and activities."

But Sample admits it isn't always easy to ask for help: "I [like most] suffered from high levels of stress. It took a lot of strength for me to hold it together. I know that opening myself up to ask for help would not only make me vulnerable but it would possibly fill my cup with that half ounce of emotional energy that I didn't think I could handle at the time. It took me some time but when I did ask for help, I was extremely grateful."

Sample sees a desire to maintain privacy as another barrier to reaching out to the FRGs. Financial issues, emotional issues and family struggles are examples of situations families are reluctant to share. A typical quote might be "I don't want people knowing my business. If I tell [someone in the system, it could get back to my spouse's Commander] and affect his career." But, as Sample puts it, "Our FRG leadership is strong with the knowledge of what resources are out there and empowered to put that knowledge to great use for our military families. Several volunteers told me that they felt good about sharing their knowledge with others. Soon, they'll tell others and the word spreads like wildfire. This provides a positive direction for our military families to look toward."

As Vermont's FRG program has grown, families have noticed the difference. Positive feedback about the wealth of resources available is regularly communicated and the hard work of the Vermont Family Readiness Program and its enthusiastic FRGs has been well-received and appreciated.

Vermont Guard members and their families who need emergency assistance can call the 24-hour emergency line at the Joint Operations Center: 1-888-607-8773.

For more information about the Family Readiness Program, please visit *www.jointservicessupport.org.*

Structural Elements Common to Vermont Family Readiness Programs

Family Readiness Assistant and Support Assistants
Assist with establishing, training and coordinating the FRG membership.

Family Assistance Center Specialists
Provide information, resources and support for crisis intervention, community information and outreach, problem solving, legal matters, financial needs, TRICARE, ID Cards and DEERS, as well as local and national emergencies and evacuations.

Military Family Life Consultant
Provides service to individuals, couples, families and children regarding the impact of deployment and the stress of military life.

Youth Programs Coordinator
Plans and implements school vacation camps, summer camps, and a leadership teen council.

Operation Military Kids
Federally funded program for military kids to join both their military and community peers to create an understanding of what it's like to be a "military kid."

Veterans Transition Assistance Advisor
Assists Veterans with access to their VA benefits and entitlements.

Hunter-Strickland Award Recipient Named

By: Kelly Kotch, FHP&R Staff Writer

A critical component to keeping our deployed Service members safe and healthy is the preventive medicine, public health and health promotion activities that occur in deployed locations, especially those without a strong public health infrastructure. The men and women who perform these duties are an essential piece to our warfighting effort. The Military Health System (MHS) annually honors the individual who makes life-changing contributions in the areas of preventive medicine, public health and health promotion in support of Department of Defense deployed operations.

The honoree receives the MHS "Hunter-Strickland Excellence Award for Deployed Preventive Medicine", named for Col. George W. Hunter, III and Capt. G. Thomas Strickland, pioneers of deployed preventive medicine. Dr. Hunter is best known for co-authoring the original "Manual of Tropical Medicine" in 1945 which eventually became Tropical Medicine and Emerging Infectious Diseases, edited by Dr. Strickland from its 6th edition until present. Their work has advanced the world's understanding of tropical diseases.

To qualify for the Hunter-Strickland award, each Service nominates one outstanding individual who best exemplifies the work of Col. Hunter and Capt. Strickland. The nominees are judged based upon scope of responsibility, performance in a deployed setting, use of new initiatives and techniques, and the results of their actions.

Lt. Col. Long, recipient of the 2009 Hunter-Strickland Award, was selected due to his outstanding leadership and service initiatives.

The 2009 award was presented at the 2010 Force Health Protection Conference to Lieutenant Colonel Richard E. Long, Public Health Officer, Air National Guard. Lt. Col. Long served at the Combined Security Transition Command-Afghanistan from February 2009 to August 2009. During his tenure, he made a lasting impact on the Afghan National Police medical system. He was responsible for providing leadership and guidance over personnel, logistics, facilities, contracting, education and training. His support led to the development of a MEDLOG program supplying all five regions of Afghanistan with medical equipment. He coordinated ground and air transportation of medical screening kits and supplies to all provinces in Afghanistan.

Lt. Col. Long also was responsible for creating the Medical Entrance Processing for the Afghan National Police recruits and implementing the Afghan National Police Drug Testing Train the Trainer Program. More than 7,000 Afghan National Police members were screened for drug use through this program; 92,000 additional police members will be drug tested in the future.

Lt. Col. Long also served as a public health mentor to the Office of the Surgeon General of the Afghan National Police where he developed a Bloodbourne Pathogen/Infection Control Train the Trainer Program for the Afghan National Police. This program improved the health and protection of the Afghan National Police, their families, and their recruits from bloodbourne illnesses.

His leadership and initiatives were monumental in preserving and promoting the health and welfare of the Afghan National Police.

Helpful Resources

Force Health Protection and Readiness (FHP&R)
fhpr.osd.mil

ARNG Decade of Health
www.healthysoldier.com

Defense Centers of Excellence
www.dcoe.health.mil

Department of Veterans Affairs
1-800-827-1000
www.va.gov

Deployment Health & Family Readiness Library
deploymenthealthlibrary.fhpr.osd.mil

DeployMed ResearchLINK
fhpr.osd.mil/deploymed

DoD Deployment Health Clinical Center
1-866-559-1627
www.pdhealth.mil

DoD Mental Health Self-Assessment Program
www.pdhealth.mil/mhsa.asp

FHP&R on Twitter
twitter.com/forcehealth

GulfLINK
gulflink.fhpr.osd.mil

Human Performance Resource Center
www.humanperformanceresourcecenter.org

Military Health System
health.mil

Military OneSource
www.militaryonesource.com

MILVAX
www.vaccines.mil

National Suicide Prevention Lifeline
1-800-273-TALK (8255)

Post-Deployment Health Reassessment
fhp.osd.mil/pdhrainfo/index.jsp

TRICARE
www.tricare.osd.mil

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